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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/629,717

Applicant(s)

BAE ET AL.

Examiner

JEREMY DUFFIELD

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/02)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 8 April 2008 have been fully considered but they are not persuasive.

In response to Applicant's arguments regarding "There is no teaching...as recited in claim 33", Page 18, lines 1-3, the Examiner respectfully disagrees. Claim 33 states three alternative types of information, a reference clock value, a multimedia document, or media data. Regardless, the RTSP specification teaches defining all three types of information. The reference clock value type is defined using a time Range field (Page 52, Sec. 12.29), RTP-Info field (Page 53, Sec. 12.33), Date field (Page 49, Sec. 12.18), and/or an Expires field (Page 49, Sec. 12.19). The multimedia document scheduled for a future time, media data, and reference clock value types are all defined using the presentation description which is used for the Content-Type field (Page 7; Page 30, Sec. 10.2; Page 49, Sec. 12.16; Page 52, Sec. 12.29; Page 79, Sec. C.1.1; Page 80, Sec. C.1.2, C.1.3).

2. Applicant's arguments with respect to claims 1, 6, 16, 17, 22, 32, and 35 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6-9, 16-20, 22-25, and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Piotrowski (US 2002/0188959) in view of the Real-Time Streaming Protocol Specification.

Regarding claim 1, Piotrowski teaches an apparatus for transmitting multimedia broadcasting (Fig. 1, el. 19), comprising:

a reference clock generator/transmitter, which generates and transmits a reference clock value of real-time multimedia broadcasting (Para. 25, 31-38);

a multimedia document generator/transmitter, which generates and transmits a multimedia document scheduled at the generated reference clock value, i.e. web server generates and transmits scheduled SMIL documents (Para. 19, 29-38); and

a media data generator/transmitter, which generates and transmits media data used to render the generated multimedia document, i.e. web server generates and transmits supplemental multimedia information which includes audio and video (Para. 24, 29-38).

Piotrowski does not clearly teach the reference clock value is a current time value.

The RTSP Specification teaches transmitting a Play message that specifies a time in universal time code at which the presenting of the media should start (Page 33-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Piotrowski's transmitter to schedule each multimedia document using the time information in the Play message in RTSP as the reference clock value, as taught by the RTSP Specification, for the purpose of allowing the user to have more program-related additional information available while viewing a scheduled broadcast television program using the well-known and established RTSP streaming media standard.

Regarding claim 2, Piotrowski (Para. 31-38) in view of the RTSP Specification teaches the multimedia document is a synchronized multimedia integration language (SMIL) document.

Regarding claim 3, Piotrowski (Para. 31-38) in view of the RTSP Specification (Page 33-34) teaches the reference clock generator/transmitter, the multimedia document generator/transmitter, and the media data generator/transmitter transmit the reference clock value, the multimedia document, and the media data, respectively, in the form of a predetermined data stream, i.e. Play message contains time codes and URLs which link to the media.

Regarding claim 4, Piotrowski in view of the RTSP Specification teaches an RTSP response can be composed of type information, (Page 7; Page 30,

Sec. 10.2; Page 49, Sec. 12.16, 12.18, 12.19; Page 52, Sec. 12.29; Page 53, Sec. 12.33; Page 79, Sec. C.1.1; Page 80, Sec. C.1.2, C.1.3), time slot information, i.e. range of presentation or time of availability (Page 52, Sec. 12.29; Page 81, Sec. C.1.5, C.1.6), payload length information, i.e. content length (Page 30, Sec. 10.2; Page 49, Sec. 12.14), and payload information, i.e. entity (Page 30, Sec. 10.2; Page 26, Sec. 8), Note: for a more detailed description of the type information refer to Examiner's remarks in the Response to Arguments section.

Regarding claim 6, Piotrowski teaches an apparatus for receiving multimedia broadcasting (Fig. 1, el. 11, 12, 14), comprising:

- a reference clock receiver, which receives a reference clock value of real-time multimedia broadcasting, i.e. receiving a time code embedded in the media (Para. 25, 31-38);

- a multimedia document receiver/storage, which receives and stores a first multimedia document, Note: the multimedia document must be at least temporarily stored while it is being analyzed (Para. 19, 25, 28, 31-38, 45).

- a media data receiver/storage, which receives and stores first media data (Para. 19, 25, 28, 31-38, 45); and

- a multimedia document renderer, which when the first multimedia document is scheduled at the reference clock value and first media data is a rendering material used to render the first multimedia document, renders the first multimedia document using the first media data (Para. 30-38).

Piotrowski does not clearly teach the reference clock value is a current time value.

The RTSP Specification teaches transmitting a Play message that specifies a time in universal time code at which the presenting of the media should start (Page 33-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Piotrowski's receiver to receive each scheduled multimedia document using the time information in the Play message in RTSP as the reference clock value, as taught by the RTSP Specification, for the purpose of allowing the user to have more program-related additional information available while viewing a scheduled broadcast television program using the well-known and established RTSP streaming media standard.

Regarding claim 7, Piotrowski (Para. 31-38) in view of the RTSP Specification teaches the multimedia document is a synchronized multimedia integration language (SMIL) document.

Regarding claim 8, Piotrowski (Para. 31-38) in view of the RTSP Specification (Page 33-34) teaches the reference clock receiver, the multimedia document receiver/storage, and the media data receiver/storage receive the reference clock value, the first multimedia document, and the first media data, respectively, in the form of a predetermined data stream.

Regarding claim 9, claim is analyzed with respect to claim 4.

Regarding claim 16, claim is analyzed with respect to the combination of claims 1 and 6.

Regarding claim 17, claim is analyzed with respect to claim 1.

Regarding claim 18, claim is analyzed with respect to claim 2.

Regarding claim 19, claim is analyzed with respect to claim 3.

Regarding claim 20, claim is analyzed with respect to claim 4.

Regarding claim 22, claim is analyzed with respect to claim 6.

Regarding claim 23, claim is analyzed with respect to claim 7.

Regarding claim 24, claim is analyzed with respect to claim 8.

Regarding claim 25, claim is analyzed with respect to claim 4.

Regarding claim 32, claim is analyzed with respect to the combination of claims 1 and 6.

Regarding claim 33, claim is analyzed with respect to the combination of claims 1 and 4.

Regarding claim 34, Piotrowski in view of the Real-Time Streaming Protocol Specification teaches the type information, the time slot information, the payload length information, and the payload information are sequentially arranged. It would have been obvious to one of ordinary skill in the art at the time the invention was made because sequentially arranging the type information, the time slot information, the payload length information, and the payload information is a predictable variation of the RTSP standard. This enables the receiver to quickly process the RTSP header fields.

Regarding claim 35, Piotrowski (Para. 42-45) in view of the RTSP Specification teaches a computer-readable recording medium in which a program for executing the method of claim 17 in a computer is recorded.

5. Claims 5, 10-15, 21, and 26-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Piotrowski in view of the RTSP Specification and further in view of Blacketter (US 6,415,438).

Regarding claim 5, Piotrowski in view of the RTSP Specification teaches all elements of claim 1.

Piotrowski in view of the RTSP Specification does not clearly teach the reference clock generator/transmitter transmits the reference clock value, which increases by a predetermined value, whenever the reference clock value increases by the predetermined value.

Blackketter teaches periodically broadcasting the current time to the receiver (Col. 5, lines 21-33).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Piotrowski in view of the RTSP Specification's reference clock generator/transmitter to transmit the reference clock value, which increases by a predetermined value, whenever the reference clock value increases by the predetermined value, as taught by Blackketter, for the purpose of synchronizing the time of the receiver with the time of the transmitter, so interactive material can be inserted and presented at the appropriate time.

Regarding claim 10, Piotrowski in view of the RTSP Specification teaches all elements of claim 6.

Piotrowski in view of the RTSP Specification does not clearly teach the reference clock generator/transmitter transmits the reference clock value, which

increases by a predetermined value, whenever the reference clock value increases by the predetermined value.

Blacketter teaches periodically broadcasting the current time to the receiver (Col. 5, lines 21-33).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Piotrowski in view of the RTSP Specification's reference clock generator/transmitter to transmit the reference clock value, which increases by a predetermined value, whenever the reference clock value increases by the predetermined value, as taught by Blacketter, for the purpose of synchronizing the time of the receiver with the time of the transmitter, so interactive material can be inserted and presented at the appropriate time.

Regarding claim 11, Piotrowski in view of the RTSP Specification in view of Blacketter teaches a first multimedia document is not scheduled at a reference clock value, a multimedia document renderer stands by until receipt of a predetermined reference clock value at which the first multimedia document is scheduled, i.e. the SMIL document media components are scheduled and synchronized using broadcasted trigger time codes (Piotrowski-Para. 31-38).

Regarding claim 12, Piotrowski in view of the RTSP Specification in view of Blacketter teaches transmitting a trigger, which contains a future presentation

time attribute and a URL, prefetching the information resource contained at the URL, and executing the trigger at the future time (RTSP-Page 33-34; Blackketter-Col. 5, lines 5-40; Col. 6, line 60-Col. 7, line 25). Therefore, Piotrowski in view of the RTSP Specification in view of Blackketter teaches when the first multimedia document is scheduled at the reference clock value but the first media data is not a rendering material used to render the first multimedia document, the multimedia document renderer holds the first media data in standby and then uses the first media data when rendering a second multimedia document, whose rendering material is the first media data and which is scheduled at a predetermined reference clock value (Blackketter-Col. 5, lines 5-40; Col. 6, line 60-Col. 7, line 25).

Regarding claim 13, Piotrowski in view of the RTSP Specification in view of Blackketter teaches transmitting a trigger, which contains a future presentation time attribute and a URL, prefetching the information resource contained at the URL, and executing the trigger at the future time (RTSP-Page 33-34; Blackketter-Col. 5, lines 5-40; Col. 6, line 60-Col. 7, line 25). Therefore, Piotrowski in view of the RTSP Specification in view of Blackketter teaches when a first multimedia document under rendering is not scheduled at a predetermined increasing reference clock value, i.e. the trigger has expired or the multimedia document is finished (Blackketter-Col. 8, lines 15-49; Col. 10, lines 44-50), the multimedia document renderer stops rendering the first multimedia document and then

renders a second multimedia document scheduled at the predetermined increasing reference clock value when the second multimedia document has been stored, i.e. the trigger for the new multimedia document is executed and the document is rendered (Blacketter-Col. 5, lines 5-40; Col. 6, line 60-Col. 7, line 25).

Regarding claim 14, Piotrowski in view of the RTSP Specification in view of Blacketter teaches transmitting a trigger, which contains a future presentation time attribute and a URL, prefetching the information resource contained at the URL, and executing the trigger at the future time (RTSP-Page 33-34; Blacketter-Col. 5, lines 5-40; Col. 6, line 60-Col. 7, line 25). Therefore, Piotrowski in view of the RTSP Specification in view of Blacketter teaches when a first multimedia document under rendering is not scheduled at a predetermined increasing reference clock value, i.e. the trigger has expired or the multimedia document is finished (RTSP-Page 33-34; Blacketter-Col. 8, lines 15-49; Col. 10, lines 44-50), the multimedia document renderer stops rendering the first multimedia document and then receives and stores a second multimedia document scheduled at the predetermined increasing reference clock value when the second multimedia document has not been stored (RTSP-Page 33-34; Blacketter-Col. 5, lines 5-40; Col. 6, line 60-Col. 7, line 25).

Regarding claim 15, Piotrowski in view of the RTSP Specification in view of Blacketter teaches transmitting a trigger, which contains a future presentation time attribute and a URL, prefetching the information resource contained at the URL, and executing the trigger at the future time (RTSP-Page 33-34; Blacketter-Col. 5, lines 5-40; Col. 6, line 60-Col. 7, line 25). Therefore, Piotrowski in view of the RTSP Specification in view of Blacketter teaches when a first multimedia document under rendering is not scheduled at a predetermined increasing reference clock value, i.e. the trigger has expired or the multimedia document is finished (RTSP-Page 33-34; Blacketter-Col. 8, lines 15-49; Col. 10, lines 44-50), the multimedia document renderer stops rendering the first multimedia document and then receives and stores second media data used to render a second multimedia document scheduled at the predetermined increasing reference clock value when the second multimedia document has been stored, but the second media data has not been stored, i.e. the second multimedia document has been prefetched (RTSP-Page 33-34; Blacketter-Col. 5, lines 5-40; Col. 6, line 60-Col. 7, line 25).

Regarding claim 21, claim is analyzed with respect to claim 5.

Regarding claim 26, claim is analyzed with respect to claim 10.

Regarding claim 27, claim is analyzed with respect to claim 11.

Regarding claim 28, claim is analyzed with respect to claim 12.

Regarding claim 29, claim is analyzed with respect to claim 13.

Regarding claim 30, claim is analyzed with respect to claim 14.

Regarding claim 31, claim is analyzed with respect to claim 15.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEREMY DUFFIELD whose telephone number is (571)270-1643. The examiner can normally be reached on Mon.-Thurs. 8:00 A.M.-5:30 P.M. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

17 July 2008
JSD

/Scott Beliveau/
Supervisory Patent Examiner, Art Unit 2623